



FORMATION EVALUATION LOG



WELL : MANTA 2A

FROM (m): 2000 TO (m): 2720 SCALE: 1/ 500

Country : AUSTRALIA	Latitude : 38°16'39.41"S	HOLE / CASING INFO 17 1/2" Hole to (mMDRT) : 994.0m	Spud Date : 23-01-2006
Basin : GIPPSLAND	Longitude : 148°42'58.03"E	12 1/4" Hole to (mMDRT) : XXXX	Total Depth Date : XX-XX-2006
Field : MANTA	UTM Co-ord X (m E) : 649251.9	8 1/2" Hole to (mMDRT) : TD DEPTH	Total Depth (mRT) : TD DEPTH
Permit : VIC/L26	UTM Co-ord Y (m N) : 5759566.4	13 3/8" Shoe at (mMDRT) : 984.5m	T.V.D. (mSS MSL) : TD TVD
Well Type : DEVELOPMENT	RT-LAT (m) : 21.5	9 5/8" Shoe at (mMDRT) : XXXX	Status : STATUS
Rig Name : OCEAN PATRIOT	RT-Seabed (m) : 155.3	7" Shoe at (mMDRT) :	

ABBREVIATIONS

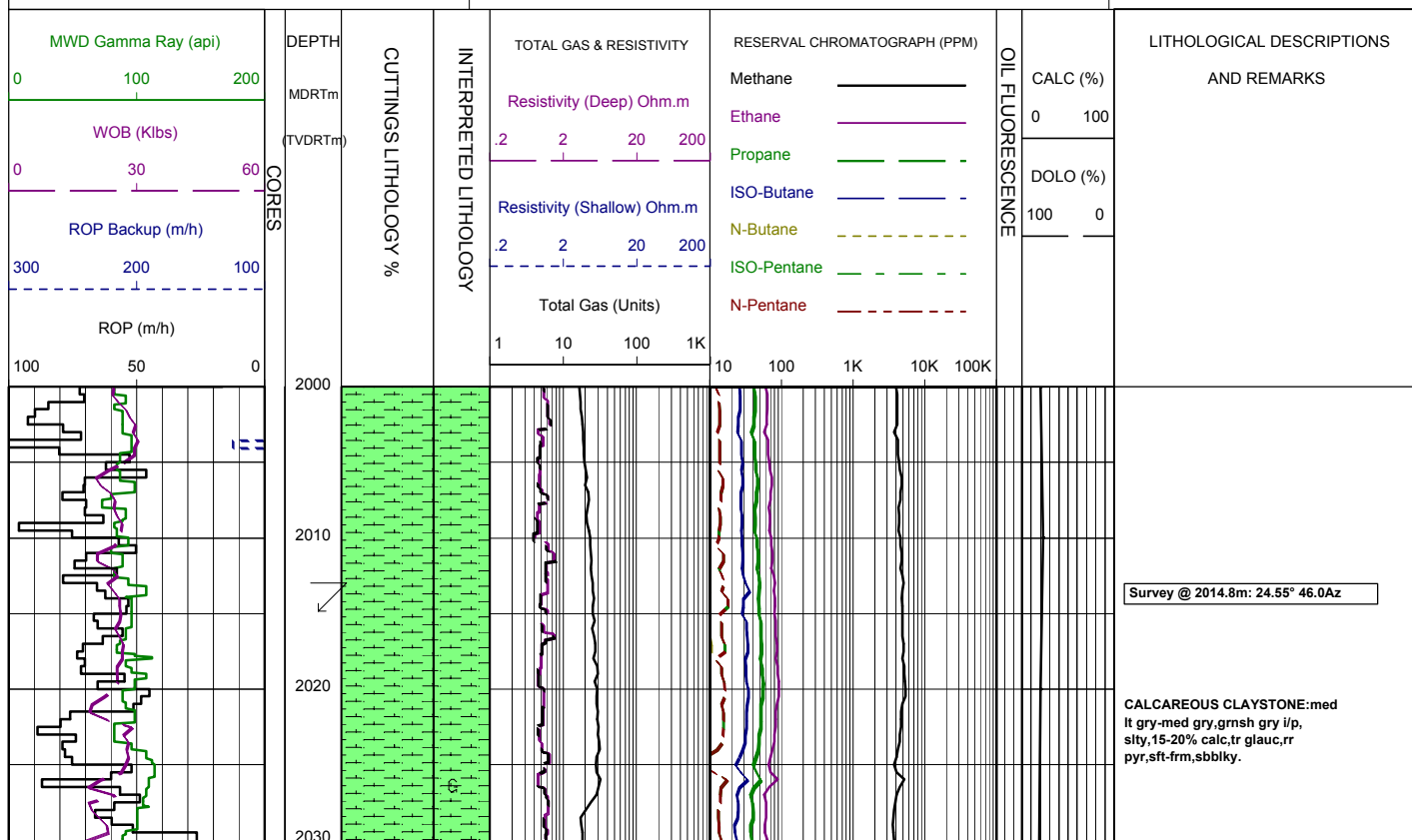
MW MUD WEIGHT	NB NEW BIT
FV FUNNEL VISCOSITY	RR RERUN BIT
PV PLASTIC VISCOSITY	CB CORE BIT
YP YIELD POINT	WOB WEIGHT ON BIT
FC FILTER CAKE	RPM REVS PER MINUTE
SOL SOLIDS	FLC FLOW CHECK
WL FILTRATE	CR CIRCULATE RETURNS
SD SAND - %	PR POOR RETURNS
S SALINITY - PPM	NR NO RETURNS
RM MUD RESISTIVITY	BG BACKGROUND GAS
RMF MUD FILTRATE	TG TRIP GAS
C CARBIDE TEST	STG SHORT TRIP GAS
LAT LOGGED AFTER TRIP	CG CONNECTION GAS
DS DEVIATION SURVEY	SG SWAB GAS
	SVG SURVEY GAS

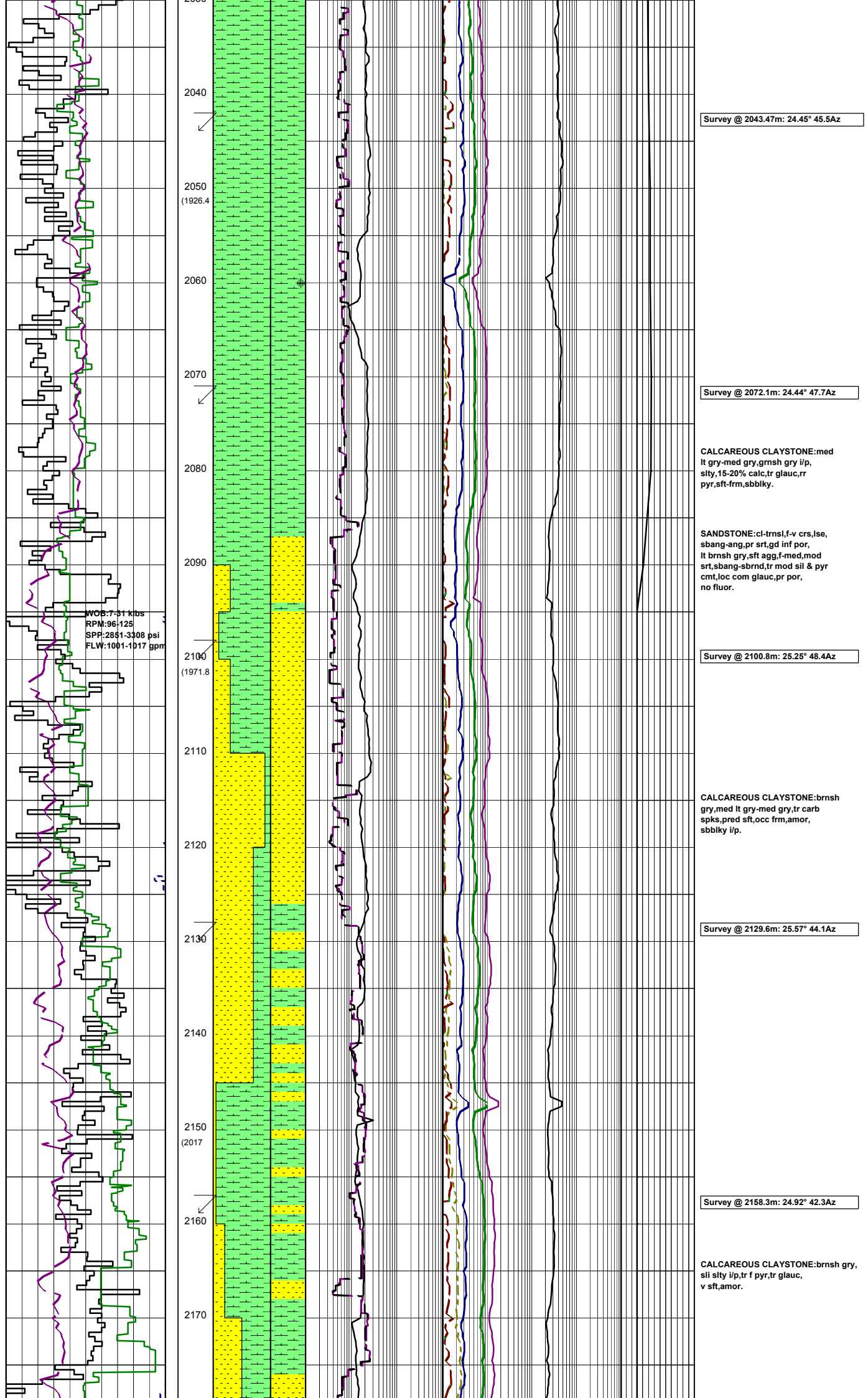
LITHOLOGY LEGEND

	Claystone		Limestone		Brachiopoda
	Siltstone		Dolomite		Cement
	Shale		Coal		Sponges
	Fine SST		Volcanics		Glauconite
	Medium SST		Lithic Fragment		Pyrite
	Coarse SST		Foraminifera		Iron Minerals
	Marl		Fossils		Mica
	Calc Claystone		Bryozoa		Carb Fragments

ENGINEERING LEGEND

	Shoe		FIT
	Bit Trip		Mud loss
	Deviation survey		Mud gain
	DST		
	Test		
	Sidewall Core		
	Core		
	Wiper Trip		
	RFT		

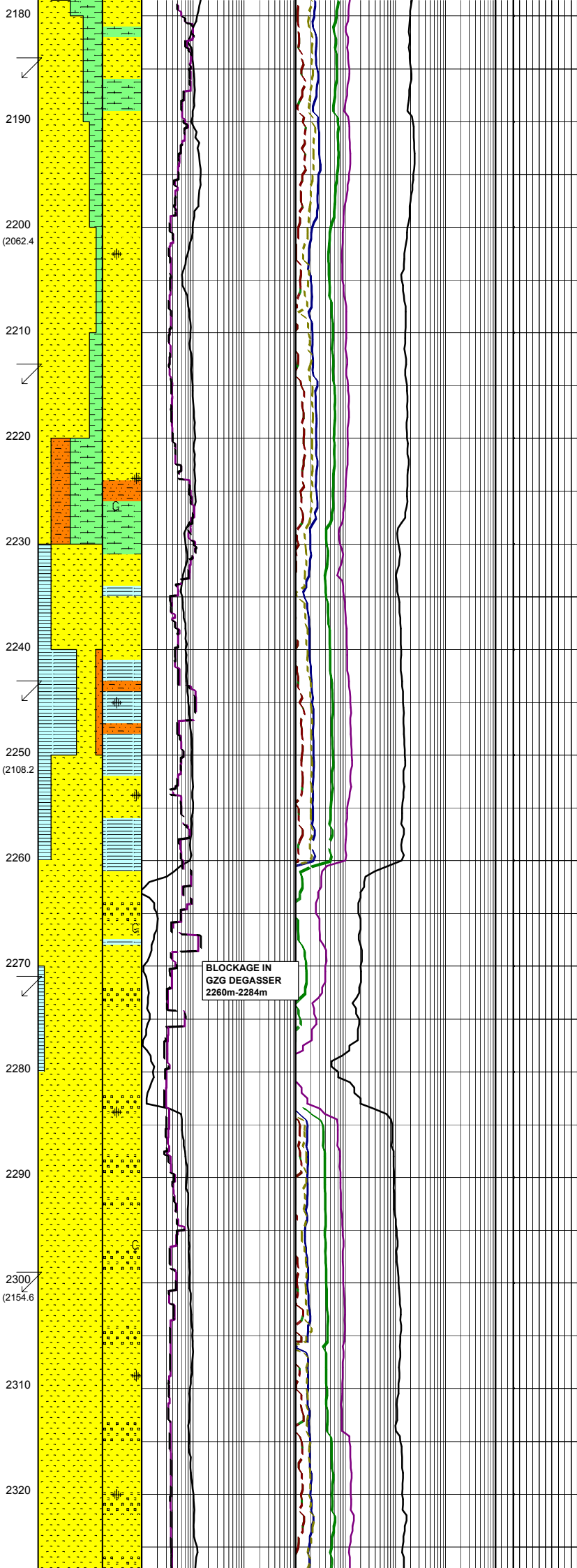




WOB: 8-29 klbs
RPM: 61427
SPP: 2392-3377 psi
FLW: 764-1029 gpm

31-01-2006

WOB: 20-25 klbs
RPM: 130
SPP: 3360 psi
FLW: 990-1090 gpm



Survey @ 2186.9m: 24.73° 41.3Az

SANDSTONE:clr-trnsl,frstd,lse,lt gry,f-v crs,v pr srt,sbang-pred sbrnd,wk sil cmt,tr wk calc cmt, tr wh kaol & gry slty mtx,occ pyr, fr-gd inf por,no fluor.

Survey @ 2215.5m: 24.18° 43.0Az

SILTSTONE:lt gry,olv gry,tr pl brn,occ mott wh/gry,pred aren grd to slty SST,com arg,tr calc, tr-occ carb spks,tr-occ dissem & nod pyr,rr glauc incl, v sft-disp,sbbkly-amor.

CLAYSTONE:brnsh gry,med-lt gry, carb spks,tr micmic,sft,amor-sbbkly i/p.

Survey @ 2244.2m: 22.33° 45.2Az

SANDSTONE:cl,tnsl,occ wh,occ yel stn grs,lse,vf-crs,dom f-med, mod srt,sbrnd-rnd,sbspher-spher, tr pyr cmt,tr carb grs,gd por, no fluor.

Survey @ 2272.8m: 21.89° 45.1Az

CLAYSTONE:lt gry-lt olv gry, com slty,aren i/p,calc i/p,tr pyr nods,rr carb spks & glauc incl, v sft-fm,sbbkly-blky.

Survey @ 2301.5m: 22.34° 45.3Az

SANDSTONE:clr,tnsl,frstd,occ med gry,f-v crs,v pr srt,sbang-pred ang,wk sil cmt,wk dol cmt, occ pyr mtx,rr glauc,lse-occ fri,mod hd i/p,fr-gd inf por, fr vis por,no fluor.

BLOCKAGE IN
GZG DEGASSER
2260m-2284m

MW 9.55
FV 64
PV 20
YP 34
Gel 9/16/20
WL 4.6
Sol 8.5
pH 9
CK 1/1
Cl 44k

03-02-2006

2330
2340
2350 (2200.6)
2360
2370
2380
2390
2400 (2246.3)
2410
2420
2430
2440
2450 (2291.8)
2460
2470

Survey @ 2330.2m: 23.00° 43.9Az

SANDSTONE:clr-trnsl,tr frstd,rr opq,f-occ crs,pr srt,sbang-pred sbrnd,wk sil cmt,occ nod pyr, com lse,gd por,no fluor.

SANDSTONE:clr-trnsl,tr frstd, gen f-med,crs i/p,pr-mod srt, sbrnd,tr wk sil cmt,occ nod pyr, gen lse cln sand,gd inf por, no fluor.

POOH @ 2360m TO SHOE TO REPAIR TOP DRIVE MOTOR

Survey @ 2359.2m: 23.76° 44.1Az

SANDSTONE:cl-trnsl,med-crs,pr srt, sbang-sbrnd,pyr & sil cmt,tr rd lithic incl,rr glauc,v gd inf por, no fluor.

Survey @ 2387.8m: 24.24° 44.1Az

ARGILLACEOUS SILTSTONE:med dk gry-dk gry,mnr cly dec w- dpth,tr carb spk, rr glauc,tr calc,frm-mod hd,sbbiky-biky,sbfiss i/p.

Survey @ 2416.8m: 24.95° 43.9Az

SANDSTONE:cl-trnsl,pred f-med,occ crs,mod srt,sbang-sbrnd,pyr & calc cmt,mnr kao mtx,tr rd lithic incl, rr glauc,gd vis por,v gd inf por, tr dll yel-crm min fluor.

Survey @ 2444.5m: 24.15° 47.4Az

CLAYSTONE:brnsh gry,med-dk gry, v sft-rr frm,amor-sbbiky,occ vf snd,tr-com glauc,occ glauc nod.

SILTSTONE:brnsh gry,gm spkld, sil i/p,aren,com f snd,com nod glauc,tr pyr,frm,sbbiky-biky.

Survey @ 2472.7m: 22.73° 50.2Az

WOB:5.17 klb
RPM:86-130
SPP:2063-3443 psi
FLW:727-887 gpm

04-02-2006

2480
2490
2500 (2337.9)
2510
2520
2530
2540
2550 (2384.3)
2560
2570
2580
2590
2600 (2430.3)
2610
2620

WOB:17-21 klbs
RPM:90-105
SPP:2600 psi
FLW:800 gpm

WOB:19-21 klbs
RPM:100-125
SPP:2700 psi
FLW:815 gpm

SANDSTONE:cl-trnsl,tr mky,f-med,occ crs,mod-pr srt,sbang,pyr & calc cmt,mnr kaol mtx,tr rd lithic incls, rr glauc,fr vis por,v gd inf por, no fluor.

CLAYSTONE:med gry,lt gry,brn i/p, v sft-rr frm,occ pyr,rr glauc, rr glauc,amor-tr sbbiky.

SILTSTONE:med brn,gry/brn,com arg, tr aren,occ micmic,com carb spks, carb lam i/p,nod pyr,sft-loc frm, sbbiky-occ amor.

Survey @ 2501.2m: 21.95° 55.9Az

SANDSTONE:cl-trnsl,tr mky,rr opq, f-occ med,crs i/p,mod-pr srt,sbang, occ pyr cmt,tr calcite cmt,tr kaol /sly mtx,rr glauc,com lse,pr vis por,fr-gd inf por,no fluor.

CLAYSTONE:med brn,gry/brn,pl gry i/p,com arg,occ carb & micmic i/p,glauc,tr nod pyr,sft,loc frm,amor-sbbiky.

SANDSTONE:cl-trnsl,tr mky,rr opq, f-occ med,crs i/p,mod-pr srt,sbang -occ sbrnd,tr pyr cmt,tr calcite cmt rr kaol/sly mtx,prd lse,hd aggs, pr vis por,fr inf por,no fluor.

Survey @ 2530.1m: 21.84° 59.8Az

SILTY CLAYSTONE:med gry, brn/gry,arg-tr aren,micmic,carb spks,tr lam,vsft-washing out, amor.

ARGILLACEOUS SILTSTONE:brn/gry, med brn,med gry/brn i/p,arg,occ vf aren,com micmic,occ carb & i/p lam,occ pyr,vsft-sft,tr frm,amor-sbbiky i/p.

Survey @ 2559.4m: 22.13° 63.7Az

ARGILLACEOUS SILTSTONE:lt gry-brn,com aren,arg i/p,carb i/p, occ carb lam,tr nod pyr,disp-sft,sbbiky-amor.

Rmf:0.08 ohm @ 76°F

SANDSTONE:cl-trnsl,med-crs,occ v crs,mod pr srt,sbrnd-occ rnd,rr sly mtx,tr qtz ovgrth,gen cln lse sand,fr inf por,no fluor.

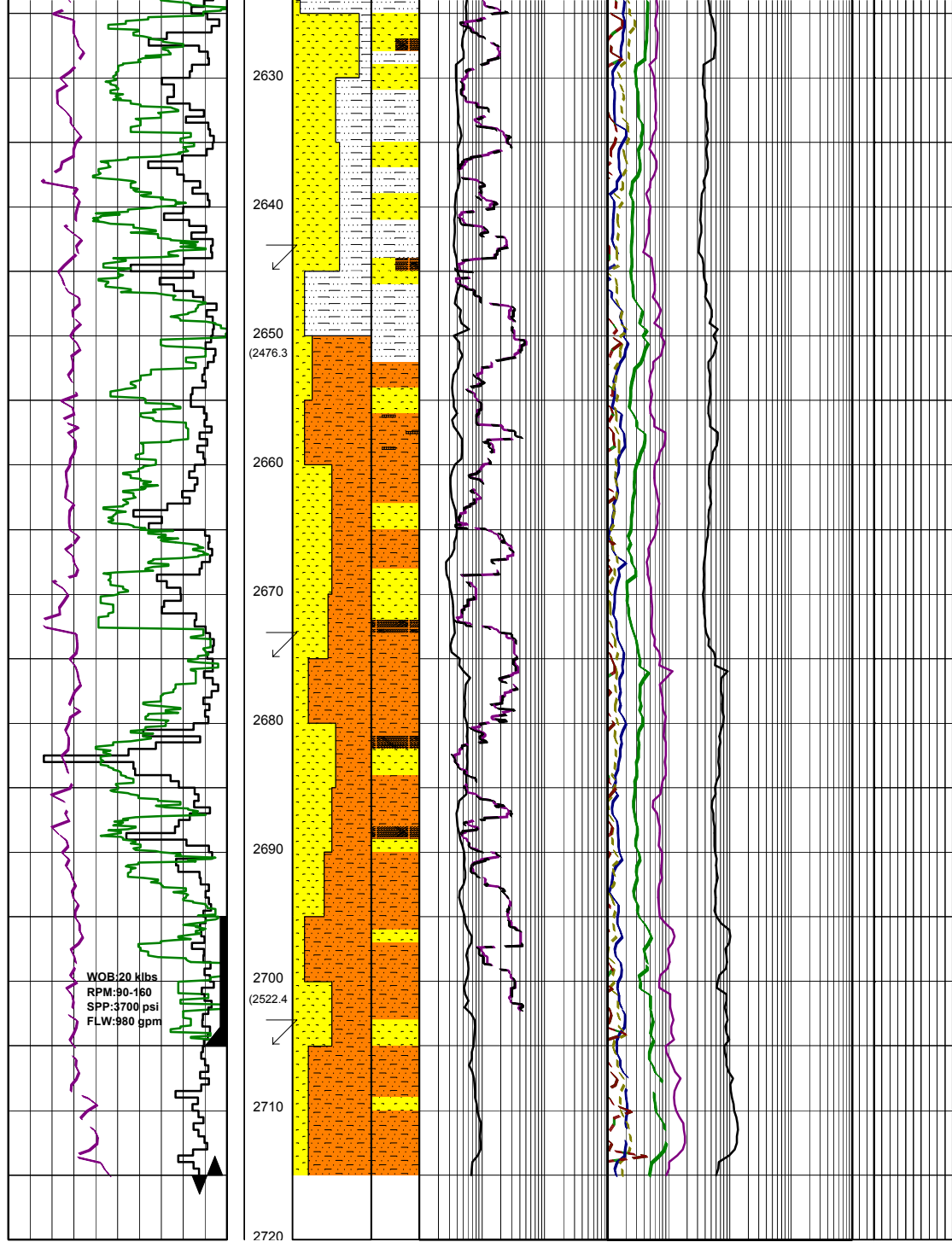
Survey @ 2588.0m: 23.56° 67.0Az

SANDSTONE:cl-trnsl,f-med,mod srt, sbrnd-sbang,tr calcite cmt,occ hd calc cmt,tr qtz ovgrth,occ pyr, gen cln lse snd,fr inf por,no fluor.

SANDSTONE:gen cl-trnsl,f-occ med, crs i/p,pr srt,sbang-sbrnd,tr calcite cmt,occ pyr disse & nod, com lse,fr inf por,no fluor.

Survey @ 2616.1m: 23.24° 72.5Az

ARGILLACEOUS SILTSTONE:lt olv gry-olv gry,gt dsky brn-brn/



blk,arg g/t Silty CLYST, tr carb mat, rr glauc, rr foss, disp-v sft, amor-sbbkly.

SANDSTONE:cl-trnsl,m-v crs,mod -pr srt,sbang-sbrnd,pred sil cmt,tr pyr cmt,tr calc mtx,v gd inf por, no fluor.

Survey @ 2645.2m: 22.80° 79.1Az

CARBONACEOUS SILTSTONE: brn/blk, stly, frm-hd, sbbkly -bkly, sbfiss.

SILTSTONE:it olv gry-olv gr, dsky brn-brn/blk, tr carb mat, rr glauc, rr foss, disp-v sft, amor -sbbkly.

SANDSTONE:cl-trnsl,m-v crs,mod -pr srt,sbang-sbrnd,pred sil cmt,tr pyr cmt, kao mtx, fr-gd inf por, no fluor.

COAL:brnsh blk-blk, vit i/p, bkly-pty, sft-frm.

Survey @ 2674.3m: 23.09° 87.7Az

SANDSTONE:cl-trnsl,rr med gry, f-crs, pr srt, pred ang-sbang, occ sbrnd, sil & pyr cmt, kao mtx, tr carb incl, fr-gd inf por, no fluor.

SILTSTONE:brn/gry-dsky brn-brn/blk, carb frag, tr arg, sft, sbbkly-bkly, splnty & sbfiss i/p.

Survey @ 2704.5m: 22.97° 91.8Az

9 5/8" CSG SHOE SET @ 2705m

BIT #4:
 SIZE: 216mm
 JETS: xxx
 IN: 2715m OUT:m
 RUN: m HRS:
 COND: IN HOLE

WOB:20 klbs
 RPM:90-160
 SPP:3700 psi
 FLW:980 gpm